

**IN THE CLAIMS:**

**Listing of Claims:** This listing of claims will replace all prior versions and listings of claims in the application:

**Claim 1 (Original):** A method to control input to an alternating current (AC) induction motor from a power supply that comprises steps of:

determining a measure of reactive power (VAR) in two input lines to the motor during a time period; and

maintaining an SSR (solid state relay) connected in series between the power supply and the motor in a non-conducting state for a subsequent time period, the length of which subsequent time period is determined by analyzing the measure of VAR.

**Claim 2 (original):** The method of claim 1 further comprising a step of driving the SSR to be conducting after the subsequent time period.

**Claim 3 (previously presented):** A method to control input to an alternating current (AC) induction motor from a power supply that comprises the steps of:

determining a measure of reactive power (VAR) in at least one input line to the motor during a time period; and

maintaining an SSR (solid state relay) connected in series in said input line between the power supply and the induction motor in a non-conducting state for a subsequent time period, the length of which subsequent time period is determined by analyzing the measure of VAR.